AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-3 are cancelled

4. (currently amended): ~~The font memory according to claim 1~~A font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input of character specifying address signals that specify the font data corresponding to a character code;

a plurality of second input terminals for input of resolution level signals that specify resolution levels of the font data; and

a plurality of output terminals through which the font data in accordance with the input of said first input terminals and said second input terminals is output, wherein,

based on character specifying address signals input from said first input terminals and resolution level signals input from said second input terminals, font data that corresponds to the character codes specified by the character specifying address signals and corresponds to the resolution levels specified by the resolution level signals is output from the

output terminals,

wherein an exclusive address is given to each dot forming the dot pattern, and the font data is information representing the dot pattern using the address exclusive to a particular dot.

5. (previously presented): A font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input of character specifying address signals that specify the font data corresponding to a character code;

a plurality of second input terminals for input of resolution level signals that specify resolution levels of the font data; and

a plurality of output terminals through which the font data in accordance with the input of said first input terminals and said second input terminals is output, wherein,

based on character specifying address signals input from said first input terminals and resolution level signals input from said second input terminals, font data that corresponds to the character codes specified by the character specifying address signals and corresponds to the resolution levels specified by the resolution level signals is output from the output terminals,

wherein the dot pattern is divided by a first division unit into a plurality of pattern areas, an address for identifying the relevant pattern area is allocated to each of the created pattern areas, each pattern area divided by the first division unit is further divided by a second division unit into a plurality of pattern areas, and an address for identifying the relevant pattern area is allocated to each of the pattern areas created using the second division unit, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

6. (previously presented): A font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input of character specifying address signals that specify the font data corresponding to a character code;

a plurality of second input terminals for input of resolution level signals that specify resolution levels of the font data; and

a plurality of output terminals through which the font data in accordance with the input of said first input terminals and said second input terminals is output, wherein,

based on character specifying address signals input from said first input terminals and resolution level signals input from said second input terminals, font data that corresponds to the character codes specified by the character specifying address signals and corresponds to the resolution levels specified by the resolution level signals is output from the output terminals,

wherein the dot pattern is divided into quarter pattern areas, two bit addresses 00, 01, 10, and 11 are allocated to each of the created pattern areas, each created pattern area is further divided into quarter pattern areas, and two bit addresses 00, 01 , 10, and 11 are further allocated to each of the created pattern areas, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

Claims 7 and 8 are cancelled.

9. (previously presented): A font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input character specifying address signals that specify the font data corresponding to a character code;

a plurality of first output terminals through which the font data in accordance with the input of said first input terminals is output; and

a plurality of second output terminals through which resolution level signals representing a resolution level of the font data are output, wherein,

the resolution level is sequentially altered at a predetermined timing and, in addition to font data corresponding to the character code specified by the character specifying address signals and corresponding to the resolution level being output from said first output terminals resolution signals representing the resolution level are output from said second output terminals,

wherein an exclusive address is given to each dot forming the dot pattern, and the font data is information representing the dot pattern using the address exclusive to a particular dot.

10. (currently amended): ~~The font memory according to claim 3~~, A font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input of character specifying address signals that specify the font data corresponding to a character code;

a plurality of second input terminals for input of resolution level signals that specify resolution levels of the font data; and

a plurality of output terminals through which the font data in accordance with the input of said first input terminals and said second input terminals is output, wherein,

based on character specifying address signals input from said first input terminals and resolution level signals input from said second input terminals, font data that corresponds to the character codes specified by the character specifying address signals and corresponds to the resolution levels specified by the resolution level signals is output from the

output terminals, and

further comprising a plurality of density level output terminals through which density level signals specifying density levels when the dot patterns are displayed is output, wherein,

based on the number of dots in the dot pattern, a density level is calculated when the dot pattern is displayed and density level signals specifying the calculated density level are output from said density level output terminals,

wherein an exclusive address is given to each dot forming the dot pattern, and the font data is information representing the dot pattern using the address exclusive to a particular dot.

11. (currently amended): ~~The font memory according to claim 8~~ A font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input character specifying address signals that specify the font data corresponding to a character code;

a plurality of first output terminals through which the font data in accordance with the input of said first input terminals is output; and

a plurality of second output terminals through which resolution level signals representing a resolution level of the font data are output, wherein,

the resolution level is sequentially altered at a predetermined timing and, in addition to font data corresponding to the character code specified by the character specifying address signals and corresponding to the resolution level being output from said first output terminals resolution signals representing the resolution level are output from said second output terminals.

further comprising a plurality of density level output terminals through which density level signals specifying density levels when the dot patterns are displayed is output, wherein,

based on the number of dots in the dot pattern, a density level is calculated when the dot pattern is displayed and density level signals specifying the calculated density level are output from said density level output terminals,

wherein an exclusive address is given to each dot forming the dot pattern, and the font data is information representing the dot pattern using the address exclusive to a particular dot.

12. (previously presented): A font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input character specifying address signals that specify the font data corresponding to a character code;

a plurality of first output terminals through which the font data in accordance with the input of said first input terminals is output; and

a plurality of second output terminals through which resolution level signals representing a resolution level of the font data are output, wherein,

the resolution level is sequentially altered at a predetermined timing and, in addition to font data corresponding to the character code specified by the character specifying address signals and corresponding to the resolution level being output from said first output terminals resolution signals representing the resolution level are output from said second output terminals,

wherein the dot pattern is divided by a first division unit into a plurality of pattern areas, an address for identifying the relevant pattern area is allocated to each of the created pattern areas, each pattern area divided by the first division unit is further divided by a second division unit into a plurality of pattern areas, and an address for identifying the relevant pattern area is allocated to each of the pattern areas created using the second division unit, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

13. (previously presented): A font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input of character specifying address signals that specify the font data corresponding to a character code;

a plurality of second input terminals for input of resolution level signals that specify resolution levels of the font data; and

a plurality of output terminals through which the font data in accordance with the input of said first input terminals and said second input terminals is output, wherein,

based on character specifying address signals input from said first input terminals and resolution level signals input from said second input terminals, font data that corresponds to the character codes specified by the character specifying address signals and corresponds to the resolution levels specified by the resolution level signals is output from the output terminals, and

further comprising a plurality of density level output terminals through which density level signals specifying density levels when the dot patterns are displayed is output, wherein,

based on the number of dots in the dot pattern, a density level is calculated when the dot pattern is displayed and density level signals specifying the calculated density level are output from said density level output terminals, and

wherein the dot pattern is divided by a first division unit into a plurality of pattern areas, an address for identifying the relevant pattern area is allocated to each of the created pattern areas, each pattern area divided by the first division unit is further divided by a second division unit into a plurality of pattern areas, and an address for identifying the relevant pattern area is allocated to each of the pattern areas created using the second division unit, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

14. (currently amended): ~~The font memory according to claim 8~~ A font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input character specifying address signals that specify the font data corresponding to a character code;

a plurality of first output terminals through which the font data in accordance with the input of said first input terminals is output; and

a plurality of second output terminals through which resolution level signals representing a resolution level of the font data are output, wherein,

the resolution level is sequentially altered at a predetermined timing and, in addition to font data corresponding to the character code specified by the character specifying address signals and corresponding to the resolution level being output from said first output terminals resolution signals representing the resolution level are output from said second output terminals,

further comprising a plurality of density level output terminals through which density level signals specifying density levels when the dot patterns are displayed is output, wherein,

based on the number of dots in the dot pattern, a density level is calculated when the dot pattern is displayed and density level signals specifying the calculated density level are output from said density level output terminals,

wherein the dot pattern is divided by a first division unit into a plurality of pattern areas, an address for identifying the relevant pattern area is allocated to each of the created pattern areas, each pattern area divided by the first division unit is further divided by a second division unit into a plurality of pattern areas, and an address for identifying the relevant pattern area is allocated to each of the pattern areas created using the second division unit, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

15. (previously presented): The font memory according to claim 9, wherein the dot pattern is divided by a first division unit into a plurality of pattern areas, an address for identifying the relevant pattern area is allocated to each of the created pattern areas, each pattern area divided by the first division unit is further divided by a second division unit into a plurality of pattern areas, and an address for identifying the relevant pattern area is allocated to each of the pattern areas created using the second division unit, and wherein the font data is information

representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

16. (previously presented): The font memory according to claim 10, wherein the dot pattern is divided by a first division unit into a plurality of pattern areas, an address for identifying the relevant pattern area is allocated to each of the created pattern areas, each pattern area divided by the first division unit is further divided by a second division unit into a plurality of pattern areas, and an address for identifying the relevant pattern area is allocated to each of the pattern areas created using the second division unit, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

17. (previously presented): The font memory according to claim 11, wherein the dot pattern is divided by a first division unit into a plurality of pattern areas, an address for identifying the relevant pattern area is allocated to each of the created pattern areas, each pattern area divided by the first division unit is further divided by a second division unit into a plurality of pattern areas, and an address for identifying the relevant pattern area is allocated to each of the pattern areas created using the second division unit, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

18. (previously presented): A font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input character specifying address signals that specify the font data corresponding to a character code;

a plurality of first output terminals through which the font data in accordance with the input of said first input terminals is output; and

a plurality of second output terminals through which resolution level signals representing a resolution level of the font data are output, wherein,

the resolution level is sequentially altered at a predetermined timing and, in addition to font data corresponding to the character code specified by the character specifying address signals and corresponding to the resolution level being output from said first output terminals resolution signals representing the resolution level are output from said second output terminals,

wherein the dot pattern is divided into quarter pattern areas, two bit addresses 00, 01, 10, and 11 are allocated to each of the created pattern areas, each created pattern area is further divided into quarter pattern areas, and two bit addresses 00, 01, 10, and 11 are further allocated to each of the created pattern areas, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

19. (previously presented): A font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input of character specifying address signals that specify the font data corresponding to a character code;

a plurality of second input terminals for input of resolution level signals that specify resolution levels of the font data; and

a plurality of output terminals through which the font data in accordance with the input of said first input terminals and said second input terminals is output, wherein,

based on character specifying address signals input from said first input terminals and resolution level signals input from said second input terminals, font data that corresponds to the character codes specified by the character specifying address signals and corresponds to the resolution levels specified by the resolution level signals is output from the output terminals, and

further comprising a plurality of density level output terminals through which density level signals specifying density levels when the dot patterns are displayed is output, wherein,

based on the number of dots in the dot pattern, a density level is calculated when the dot pattern is displayed and density level signals specifying the calculated density level are output from said density level output terminals, and

wherein the dot pattern is divided into quarter pattern areas, two bit addresses 00, 01, 10, and 11 are allocated to each of the created pattern areas, each created pattern area is further divided into quarter pattern areas, and two bit addresses 00, 01, 10, and 11 are further allocated to each of the created pattern areas, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

20. (currently amended): ~~The font memory according to claim 8~~ A font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input character specifying address signals that specify the font data corresponding to a character code;

a plurality of first output terminals through which the font data in accordance with the input of said first input terminals is output; and

a plurality of second output terminals through which resolution level signals representing a resolution level of the font data are output, wherein,

the resolution level is sequentially altered at a predetermined timing and, in addition to font data corresponding to the character code specified by the character specifying address signals and corresponding to the resolution level being output from said first output terminals resolution signals representing the resolution level are output from said second output terminals,

further comprising a plurality of density level output terminals through which density level signals specifying density levels when the dot patterns are displayed is output, wherein,

based on the number of dots in the dot pattern, a density level is calculated when the dot pattern is displayed and density level signals specifying the calculated density level are output from said density level output terminals,

wherein the dot pattern is divided into quarter pattern areas, two bit addresses 00, 01, 10, and 11 are allocated to each of the created pattern areas, each created pattern area is further divided into quarter pattern areas, and two bit addresses 00, 01, 10, and 11 are further allocated to each of the created pattern areas, and wherein the font data is information representing the dot

pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

21. (previously presented): The font memory according to claim 9, wherein the dot pattern is divided into quarter pattern areas, two bit addresses 00, 01, 10, and 11 are allocated to each of the created pattern areas, each created pattern area is further divided into quarter pattern areas, and two bit addresses 00, 01, 10, and 11 are further allocated to each of the created pattern areas, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

22. (previously presented): The font memory according to claim 10, wherein the dot pattern is divided into quarter pattern areas, two bit addresses 00, 01, 10, and 11 are allocated to each of the created pattern areas, each created pattern area is further divided into quarter pattern areas, and two bit addresses 00, 01, 10, and 11 are further allocated to each of the created pattern areas, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

23. (previously presented): The font memory according to claim 11, wherein the dot pattern is divided into quarter pattern areas, two bit addresses 00, 01, 10, and 11 are allocated to each of the created pattern areas, each created pattern area is further divided into quarter pattern areas, and two bit addresses 00, 01, 10, and 11 are further allocated to each of the created pattern areas, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

24. (previously presented): The font memory according to claim 12, wherein the dot pattern is divided into quarter pattern areas, two bit addresses 00, 01, 10, and 11 are allocated to each of the created pattern areas, each created pattern area is further divided into quarter pattern areas, and two bit addresses 00, 01, 10, and 11 are further allocated to each of the created pattern areas, and wherein the font data is information representing the dot pattern using the addresses

obtained by repeating the above division and address allocation thereafter for an optional number of times.

25. (previously presented): The font memory according to claim 13, wherein the dot pattern is divided into quarter pattern areas, two bit addresses 00, 01, 10, and 11 are allocated to each of the created pattern areas, each created pattern area is further divided into quarter pattern areas, and two bit addresses 00, 01, 10, and 11 are further allocated to each of the created pattern areas, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

26. (previously presented): The font memory according to claim 14, wherein the dot pattern is divided into quarter pattern areas, two bit addresses 00, 01, 10, and I 1 are allocated to each of the created pattern areas, each created pattern area is further divided into quarter pattern areas, and two bit addresses 00, 01, 10, and 11 are further allocated to each of the created pattern areas, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

27. (previously presented): The font memory according to claim 15, wherein the dot pattern is divided into quarter pattern areas, two bit addresses 00, 01, 10, and 11 are allocated to each of the created pattern areas, each created pattern area is further divided into quarter pattern areas, and two bit addresses 00, 01, 10, and 11 are further allocated to each of the created pattern areas, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.

28. (previously presented): The font memory according to claim 16, wherein the dot pattern is divided into quarter pattern areas, two bit addresses 00, 01, 10, and 11 are allocated to each of the created pattern areas, each created pattern area is further divided into quarter pattern areas, and two bit addresses 00, 01, 10, and 11 are further allocated to each of the created pattern areas, and wherein the font data is information representing the dot pattern using the addresses

obtained by repeating the above division and address allocation thereafter for an optional number of times.

29. (previously presented): The font memory according to claim 17, wherein the dot pattern is divided into quarter pattern areas, two bit addresses 00, O1, 10, and 11 are allocated to each of the created pattern areas, each created pattern area is further divided into quarter pattern areas, and two bit addresses 00, 01, 10, and 11 are further allocated to each of the created pattern areas, and wherein the font data is information representing the dot pattern using the addresses obtained by repeating the above division and address allocation thereafter for an optional number of times.